midal fibres, according to the author, extend directly from the peduncles to the cortex, without touching the central ganglia of the hemispheres.

II. In a special chapter the author discusses lengthily the histological character of the lesion of the white substance of the cord in amyotrophic sclerosis. He is disposed to admit that it is rather a primary degeneration of the nerve fibres, and not a primary hyperplasia of the interstitial connective tissue with secondarily atrophy of the compressed nerve elements. But in fact, direct proofs derived from microscopic examination are lacking, and Leyden claims that, in a proportion of cases of amyotrophic sclerosis, the lesion primarily affects the neuroglia, and that the atrophy of the nerve elements is only a secondary alteration.

In reality, according to Flechsig, the differences noticed by Leyden in various cases of amyotrophic sclerosis, are not more marked than those which are found in the comparison of a number of cases of secondary degeneration, some recent and others of older date.

Moreover, the systematic distribution of the lesion in the majority of cases of amyotrophic sclerosis, is a sufficient reason for holding that the primary trouble is in the nerve elements. Indeed, the different systems of fibres which by their union form columns of the cord, are nourished by a single vascular net-work, and the connective tissue which serves as a support to both vessels and nerve fibres, is alike in all. We do not see, therefore, says he, why a lesion having its point of departure in the interstitial connective tissue and limited to a small portion of the transverse section of the cord, should propagate itself through the whole length of the spinal axis without involving the whole of its white substance.

In closing, the author announces that in a later communication he proposes to define the precise *role* that the direct cortico-muscular transmission system plays in the amyotrophic lateral sclerosis of Charcot.

PARTIAL NERVE-SECTION.—In the *Archiv f. Anat. und Phys.* (1878, III. and IV., p. 218), Dr. I. Steiner describes a method of splitting the vagus longitudinally (in rabbits). The best spot for the operation is the part immediately below the ganglion of the vagus, where the nerve is flattened. On testing the artificially separated bundles, it was found that the external bundle comprised only the sensory fibres, while the internal half consisted of the motor filaments innervating the heart, larynx and œsophagus.

DEGENERATION OF S RED NERVES.—After a methodic study of the degeneration of the peripheral stump of the divided sciatic nerve (Guinea-pig) Guiseppe Colasanti (*Archiv f. Anat. und Phys.*, 1878, III. and IV., p. 206) claims that we must distinguish between the degeneration proper, which is not observable until after the lapse of 72 hours, and the traumatic change found in the peripheral stump, extending as far as the first annular constriction.

This change, quite marked within 24 hours after the division, consists in the optic disappearance of axis cylinder and medullary sheath. The interior of the neurilemma is filled with a homogeneous, strongly refracting mass, without apparent structure.

Colasanti's description of the degenerative process refers mainly to the behavior of the lately described medullary segments. About the fourth day these segments increase in width and become less refractive, until they have the appearance of paraffine. Hereupon the segments, formerly joined like cones, fitting into corresponding depressions, begin to separate, until the nerve seems to consist of a series of elongated drops. This finishes the first stage, ending about the sixth day.

As a second stage in the degeneration process, C. describes the occurrence of folds and prominences on the surface of these drops, leading to further segmentation. After the end of ten days the contents of the nerve consist of a detritus of finely granular substance, in which minute drops of fatty lustre, free nuclei and leucocytes are suspended.

OPHTHALMIC MIGRAINE.—The ocular phenomena of migraine are sufficiently prominent to be noticed by every one, but they have usually been looked on only as complications. We find in the *Gaz. des Hopitaux*, Oct. 5, an article on ophthalmic migraine as recognized by M. Galezowski. Many observations led this author to the conviction that many apparently very serious ocular troubles were purely of a nervous nature, and that they might alone constitute a true migrainous attack. Such, for example, was an attack of amblyopia, apparently indicating serious trouble, appearing all at once, after a violent nervous commotion, in a woman subject to frequent such headaches, and which disappeared altogether in the course of a few days. In another case a young man who was subject to very frequent and severe migrainous attacks, but who passed once several months without one, during which period he had, four to six times a week, amblyopic visual disorders, lasting twenty or thirty minutes each time. Such instances as these seem to indicate that the ordinary symptoms of migraine may be at times replaced by ocular disorders, purely neurotic in their nature, but closely simulating serious structural disease. This brings up another point: if this be the case, the diagnosis of ocular troubles may be embarrassed by the fact on the one hand, and on the other, there may be already existent organic disease of the eye to complicate the diagnosis of the neurosis. M. Galezowski has canvassed a vast number of observations in his experience, and has endeavored to establish the diagnosis of these special neuroses of the eye. He concludes that there is a special form of migraine, which he calls migraine of the eye, or ophthalmic migraine.

He recognizes four varieties of this affection: periodic hemiopia, scintillant scotoma, migrainous amaurosis, and photophobia. Of seventy-six cases collected forty-one were females and thirty-five males. It appears most frequently in those who have long been liable to the ordinary form of migraine, and especially in nervous hysterical women. Sometimes the ophthalmic symptoms are preceded by a violent headache, but, more frequently, they come on all at once without premonitions, and are then often but not